(3)

First & Final Bill

Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

(For Other Works)

SBR No-122 26/3/18

No:

Date:

Division: **R.R Nagar**

Sub- Division: **R.R Nagar** , Electrical

Bill Received No.....Dated.....Cash Book Voucher No.....dated.....

Scheduled Docket No. BR No-122 26/3/18

Name of Work (as per sanctioned estimate): **Providing and fixing of LED Street Light in Ward No 16 in RR Nagar Division**

Name of Contractor and Full Adress: AV Gurumurthy, Prop. M/s Kiran Electricals, Shop No-01, No-06, ITI Layout,Vijinapura, Bangalore.

Work order No : EE/ELE/RRN/W.O/10/2017-18 Dtd: 10-11-2017 **Budget Head:** P3110

Reference to Agreement : EE/ELE/RRN/AG/10/2017-18 Dtd: 10-11-2017 **Job Code:016-17-000007**

Certified that the measurements were taken by me on 9/03 and recorded of page nos 220975 to 220981 of measurement Book No: 2210/17-18. and that the work is satisfactorily executed.

Contractor

Officer in charge of work

Certified that the measurements were checked by me on 09/03 and found correct. The work is satisfactorily executed.

Cetified that the quantities of materials shown in columns 3 of Account II have been actually brought to Site of the work and the contractor has not previously received any advance on this security. These materials are of an imperishable nature and are all required for immediate use on the work in the connection with item for finished work have been agreed upon and normal agreement signed and executed by the contractor is recorded in the the office .

EE (Ele.)

Sub-division Officer AEE (Ele.)

II Memorandum of Payment

1) Total value of work done or supplies as per account within
2) Deduct amount to be held in re3serve being .....percent Rs.....
3) " Balance
4) Deduct payment :
   a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D.No.....
      Amount adjusted towards cash advance recovery of
   b) Payments cost store or other material supplied.
      Now made recovery amount creditable to this/ other work
      Amount paid on this bill cheque/cash
5) Balance being unpaid value of work done held in reserve
6) Deduct cash advance made on the Office Cash Book Voucher No..... dated.....less adjustments
7) Net amount due to or from contractor
   Unadjusted items
8) Advance to contractor for materials brought to site (as detailed) within
   Value of Government materials supplied

1374044=00

Adjustments Details

IT : 13740=00

KST : -

CBF : 1374=00

FSD : -

LC : 13740=00

FINE : -

OTHERS : -

TOTAL : 28854=00

NET: 1345190=00

Contractors Signature

Received Rs.....(in words)

.....

by cash and adjustment of payment as per memorandum.

Witnesses :

1.

2.

Dated .....Signature of contractor

Paid by me by cheque No.....Dated .....

Cash Rs.....Dated.....

Stamp

(For use in the office)

Passed for Rs. 1374044 Less Vide Cheque Rs 1345190 On Adjustment of Rs 28854 On In Words Thirteen lakh forty three thousand one hundred ninety only.

Initials of Officer making payment

Name of the work :- Providing and fixing of LED Street Light in Ward No 16 in RR Nagar Division

	Items Grouped under sub Heads and sub works of the Estimate	Unit	Previous Measurement		Present Measurement			Total Up to date	
			Qty	Cost	Qty	Rate Rs Ps	Amount Rs ps	Qty	Cost
1	Supply of solar lux level street light controller -single phase 3KW	Each			20	7900.0	158000.00	20.00	158000.00
2A	Wiring for lighting/power circuit using one of FRLS PVC insulated 11oov grade, multistrand copper with low conductor resistence single core wire in open or consealed system of wiring wit specified IS-694:1990 & confirming to GTP of group A..A) 2.5 sqmm	Per Mtr			36	20.0	720.00	36.00	720.00
2B	6 sqmm	Per Mtr			75	63.0	4725.00	75.00	4725.00
3	LED Street light.Supply of 65watts LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II. LED Streetlight 65watts	Each			30	18500.0	555000.00	30.00	555000.00
4	Supplying High pressure Sodium Vapour street light luminaire 250Watts suitable for use with high pressure Sodium Vapour lamp with integrated control gear & grey color power coated. The fitting shall be non corrosive pressure die cast aluminum housing with high purity anodized aluminum reflector with EPDM Gaskets suitable for Outer Dia of pole 40mm - 60mm. Cable Entry through a cable gland with toggle clips. IP65 Protection for both optical & Electrical Compartment. Bottom cover may be with Poly carbonate/tempered/ toughened glass. Luminaire efficiency should be >60% & ambient temperature > 35 deg C. High Intensity Discharge Electro Magnetic Ballast with Copper winding of Orthocyclic winding coil. Class H insulated dual coated copper wire. Compliance to IEC 61347-2-9 Safety & IEC 60923 - Performance. Winding Temperature for HID Ballast Tw = 130 deg C & temperature rise ?T = 70 deg C. Luminaire shall be suitable to operate on 230/250 Volts finish including wiring, suitable to operate on 230/250 Volts 50 Hz AC supply finish including wiring, ignitor, condenser. SS Toggles for opening front hingeable glass.	Each			45	6875.0	309375.00	45.00	309375.00
5	Supplying and Fixing.....mm dia class A GI pipe bracket up to 2.7 meters long terminated with a reducing collar of 40x25mm to which extra pipe of 175mm length is fixed for fixing MV/SV/MH/FTL street light fitting of all capacities on rail/RCC/wall/tubular pole, using suitable clamps, bolts ,nuts and wiring using suitable capacity wires. -Using 32mm dia G.I.pipe	Each			75	150.0	11250.00	75.00	11250.00

	Items Grouped under sub Heads and sub works of the Estimate	Unit	Previous Measurement		Present Measurement			Total Up to date	
			Qty	Cost	Qty	Rate Rs Ps	Amount Rs ps	Qty	Cost
6	Releasing and Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.(1.9 times the Basic Rate for Fixing)	Each			15	150.0	2250.00	15.00	2250.00
7	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 63Amps	Each			20	100.0	2000.00	20.00	2000.00
8	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.--60-70Amps	Each			20	4600.0	92000.00	20.00	92000.00
9A	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy class-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. A) 5-32Amps SP	Each			20	400.0	8000.00	20.00	8000.00
9B	40-63 Amps SP	Each			20	650.0	13000.00	20.00	13000.00
10	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat .... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint - 40x40x6mm	Per Mtr			18	63.0	1134.00	18.00	1134.00
	Supply and Installation / Fixing / Provision of Outdoor type Thermoplastic Modular Panel enclosure with transparent Polycarbonate Lid, shock proof, IP65 (Weather Proof), rust proof, dust proof, water proof, corrosion proof having internally Embedded gasket on both lid and flap suitable to fix Single Phase / Three Phase Energy Meter in suitable base plate and having a provision for Fuse / MCB cutout with suitable transparent hinged flap opening for operating MCB along with complete tamper proof SEALING facility. --300mmx450mmx214mm)	Each			20	5800.0	116000.00	20.00	116000.00
12	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A, 3.5 core 25 sqmm	Mtr			195	165.0	32175.00	195.00	32175.00
13	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.On wall /Structure -25 sqmm to 75 sqmm	Mtr			195	30.0	5850.00	195.00	5850.00
14	Supplying and fixing of heavy duty cable glands suitable for UG cable of 1.1 KV class (metal only) 25mm dia	Each			20	20.0	400.00	20.00	400.00
15 A	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes. 16 sqmm	Each			150	5.0	750.00	150.00	750.00
15 B	25 sqmm Long Barrel	Each			75	5.0	375.00	75.00	375.00
16	Supplying of 1.1KV grade Stranded & Compacted Aluminum Phase Conductor and Stranded Messenger Conductor with all aluminum Alloy. Phase Conductor is insulated with XLPE Compound, Bare Messenger as per IS-14255:1995 & confirming to GTP of GROUP-B. a) 2 X 16 + 1 X 25 SQ.MM	Per Mtr			250	70.0	17500.00	250.00	17500.00
17	Striniging of 1.1 KV grade aerial bunched 3 core cable of XLPE insulation standard aluminium conductor standard around a weather resistant black XLPE insulated AAA messanger wire a) 2 X 16 + 1 X 25 SQ.MM	Per Mtr			250	8.0	2000.00	250.00	2000.00
18	Dead End Clamp/ Anchor clamps assembly 25 to 95 sqmm bear messanger (Standard Stock materials 2010-11)	Each			4	40.0	160.00	4.00	160.00
19	suspension clamp assemblly 25 to 95 sqmm bear messanger (Standard Stock materials 2010-11)	Each			10	80.0	800.00	10.00	800.00
20	Errection of suspension clamp 25 to 95 sqmm bear messanger (Labour charges 2010-11)	Each			10	50.0	500.00	10.00	500.00
21	Errection of Anchor clamp 25 to 95 sqmm bear messanger (Labour charges 2010-11)	Each			10	50.0	500.00	10.00	500.00

	Items Grouped under sub Heads and sub works of the Estimate	Unit	Previous Measurement		Present Measurement			Total Up to date	
			Qty	Cost	Qty	Rate Rs Ps	Amount Rs ps	Qty	Cost
22	Fabricating, supplying and erecting swaged tubular pole of height ...Mtr having three sections, and providing two coats of red oxide paint and finished with two coats of enameled paint of approved quality and colour and M.S. base plate of suitable size welded at the bottom of the pole(as per IS) and 40mm dia GI / flexible PVC pipe of 1 mtr length fitted to the heavy gauge polycarbonate control box including 5way connector of size 167x125x82mm for 7.5M pole/200x160x98mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB / DP switch, The pole shall be erected in cement concrete work (1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be up to 0.6M above ground level as per IS 2713 - 7. Erection of heavy duty pole on Footpath / median 5.13.1.1) 9Mt (5Mt Hb,165.1mm dia 4.85mm thick x2M Hm, 139.7mm dia 4.50mm thick x 2M Ht,114.3mm dia 3.65mm thick) as per IS 410 SP 32	Each			2	15000.0	30000.00	2.00	30000.00
23	Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia 1.5m long M. S. bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 mtrs. M. S. tubular pole, with necessary two coats of painting, with all other accessories. 17.4.1)Single bracket 1.5 Mtr. Length	Each			2	1000.0	2000.00	2.00	2000.00
24	Supply and fixing of .....cross arm including all Hardware's complete as per the standard technical specification of BESCOM 2 Pin 45x45x5mm -510mm	Each			18	250.0	4500.00	18.00	4500.00
25	Supplying and Fixing ..... including all Hardware's etc. complete as per the standard technical specification of BESCOM RCC Clamp	Each			18	50.0	900.00	18.00	900.00
26	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).	Per Mtr			200	10.0	2000.00	200.00	2000.00
27 A	Supplying and Fixing .....including all Hardware's etc. complete as per the standard technical specification of BESCOM 1.1 KV Pin Insulator	Each			10	15.0	150.00	10.00	150.00
27 B	No. 8 Strain Insulator	Each			3	10.0	30.00	3.00	30.00
	TOTAL						**1374044.00**		**1374044.00**
Rupees Thirteen Lakh Seventy Four Thousand and Forty Four Only									

Certificate: Certified that this work carried out satisfactorily.

AEE (Ele.)